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JOB GROWTH, PAY & EDUCATION SINCE 2012

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JULY 2019

Executive Summary

The Rural Challenge

Both Wisconsin and the nation are experiencing rural depopulation at an unprecedented rate, at least in the modern era. During 2010-2018, two-thirds of rural counties nationally lost population. In Wisconsin, 31 of 46 rural counties had fewer residents in 2018 compared to 2010.

The pattern of rural counties growing more slowly than urban ones has a long history. However, what we see today is the slow rural growth of the past is turning to decline. During 1990-2000, only 30% of rural counties nationally and none in Wisconsin experienced population loss. During 2000-2010, those percentages climbed to 47% nationally and 44% in Wisconsin. Since 2010, a full two-thirds of rural America has experienced depopulation, with few signs that this will abate any time soon.

The economic consequences of depopulation are real – a shrinking workforce, fewer jobs in the county, fewer businesses, and slower income growth. Among the 10% of counties with the fastest population growth during 2010-2018, median growth in the labor force was 5.0%, in jobs 13.1%, and in businesses 8.5%. Among the 10% of counties with the largest population losses, median decline in workforce was 14.1%, in jobs 3.9%, and in businesses 5.5%. For counties between these two extremes, growth rates fell as population growth weakened.

Depopulation generally resulted in slower income growth as well. Among counties growing the fastest, median county income growth was over 24%. Among those with the greatest population declines, median income dropped 0.8%. With population falling along with economic activity, there appeared to be little impact on per capita income and household income.

The good news for Wisconsin is that while its rural counties are experiencing population loss, the declines are generally not as severe as elsewhere. The state had 11 counties among the top 30% nationally in population change and only one among the bottom 30%.

Among four measures of economic performance, rural counties in Wisconsin generally outperformed their counterparts nationally. In labor force growth, Wisconsin had 20 counties among the top 30% nationally, nine more than it had on population growth. On business growth, 22 rural Wisconsin counties were among the top 30%. And on income growth, the state placed 17 at that level.

The one indicator where the state lagged was job growth. Only six rural Wisconsin counties were among the top 30% nationally.

While rural depopulation in the state has not been as severe as elsewhere, policymakers should not be complacent. There are few signs that this trend will slow or reverse, and Wisconsin's experience could worsen over the next decade. In an effort to give leaders the information they need to minimize population loss or its effects in rural Wisconsin, a follow-up report from *Forward Analytics* will examine the factors drive rural population growth and decline.

The Rural Challenge

Depopulation and Its Economic Consequences

Dale Knapp, Director

In 2010, Price County's population was 14,159. By 2018, it had dropped more than 5% to less than 13,400. Coinciding with the population decline was a 12% reduction in the county's workforce. With fewer residents and workers, economic activity slowed. In 2018, the number of businesses was 7% below the 2010 level and the number of jobs had fallen by 4%. Inflation-adjusted income in this rural county rose just 4.3% during 2010-2018, far below the 17.4% statewide average.

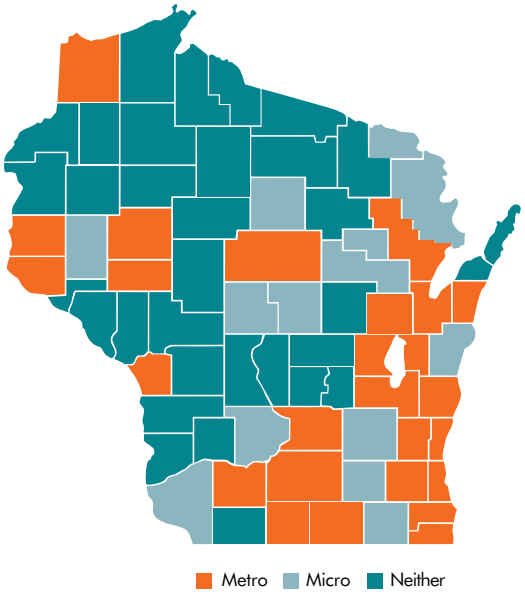
Rural depopulation and its accompanying challenges are not unique to Price County. Across both Wisconsin and the nation, populations are shifting from rural to urban areas. While this is a long-term phenomenon, it seems to have accelerated over the past 10 years.

The shift has resulted in a growing number of counties experiencing depopulation rather than modest growth. In the 1990s, about 30% of rural counties nationally saw their populations fall.[1] During 2000-2010, that percentage approached 50%, and over the eight years since it has neared 67%.

For policymakers, the answer to one question is critical for how they react: Can rural depopulation be reversed or at least halted, or will this phenomenon continue unabated for the foreseeable future? If it can be halted, then policies designed to bring about that reversal should be enacted. If the answer is that depopulation is destined to continue, then approaches that minimize the negative impacts should be considered.

1 *Excludes Alaska and Hawaii.*

FIGURE 1: Wisconsin Counties by Type



This report is the first of two on rural depopulation. It explores rural population changes nationally and how Wisconsin counties are faring compared to their counterparts elsewhere. It also looks at some of the consequences of depopulation, including job loss, a shrinking workforce, fewer businesses, and slow income growth. A follow-up report will examine the key factors behind depopulation and identify policies or actions that might be adopted to stem rural decline.

IDENTIFYING THE CHALLENGE

A study of rural counties begins with a definition of rural. This report uses the federal Office of Management and Budget's (OMB) definition of non-metropolitan counties.

Since 1990, total population growth has slowed both nationally and in Wisconsin. Along with that deceleration has been a shift from rural to urban areas.

The OMB labels counties as metropolitan, micropolitan, or neither. Metropolitan counties are part of a metropolitan statistical area (MSA), which is one or more counties that are economically integrated with an urban core of at least 50,000 residents. A micropolitan county is similarly defined with the size of the urban core between 10,000 and 50,000 residents. That leaves more than 1,200 counties that are neither metropolitan nor micropolitan. These counties combined with 657 micropolitan counties comprise the set of rural counties studied.

Of Wisconsin's 72 counties, 26 are metropolitan and 46 are rural (14 micropolitan and 32 "neither," see Figure 1 on page 3). In percentage terms, 36% of the state's counties are metropolitan and 64% are rural, which is similar to the national average (38% and 62%, respectively) Figure 2 shows counties by type nationally.

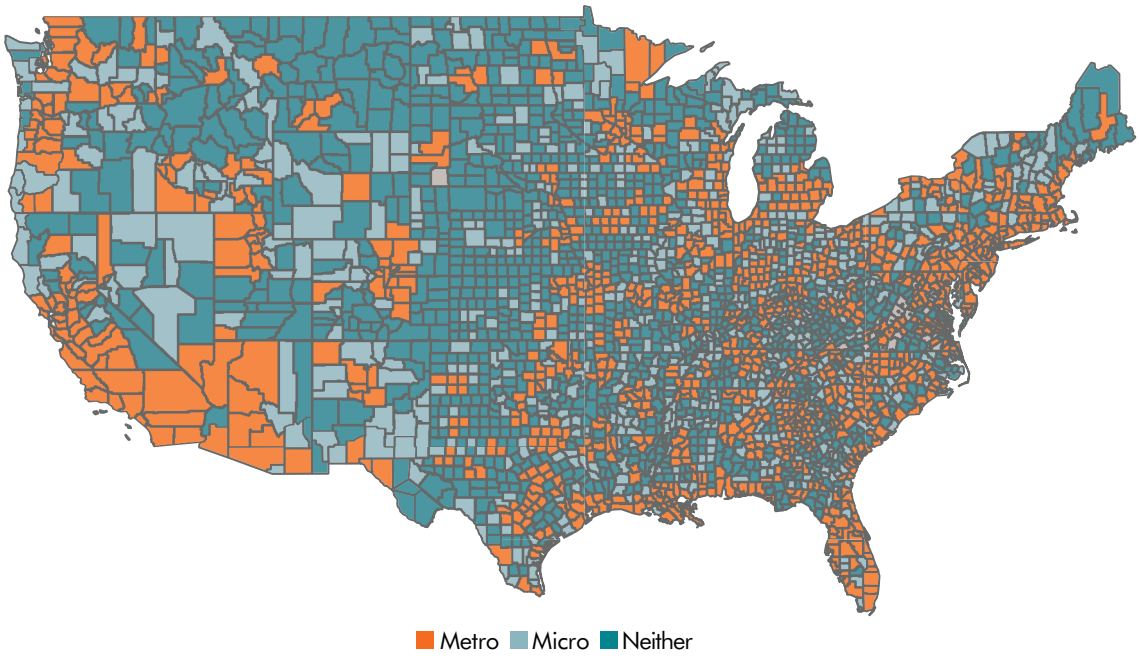
It should be said that the distinction between rural and metropolitan counties has its limitations. Some counties classified as metropolitan are demographically similar to counties classified as rural. Consider metropolitan Iowa County and rural Juneau County: They have similar populations (23,771 and 26,617, respectively) and their largest cities are similarly sized (Dodgeville at 4,711 and Mauston at 4,496).

However, because Iowa County's economy is sufficiently linked to Madison and Dane County, it is considered part of the Madison MSA and is classified as metropolitan, or urban. Juneau County is more isolated and is considered rural. While counties like Iowa County exist throughout the country, they are the exception and not the rule.

From Urban to Rural

The issue of rural depopulation is one long in the making, though it has become more pervasive since 2010. It is the result of two long-term trends – a general slowing of population growth and a movement from rural to urban counties.

FIGURE 2: U.S. Counties by Type



Over the past 28 years, U.S. population growth has slowed from 13.0% during the 1990s to under 6% from 2010 to 2018. Wisconsin's experience was similar but with lower growth rates – 9.6% during the 1990s and 3.0% during 2010-2018.

Since 1990, urban growth nationally has consistently been above national average, while rural growth has lagged, illustrating the shift from rural to urban areas. During the 1990s, urban counties added population at almost twice the rate as rural ones (see Figure 3, left). The gap widened during 2000-2010, and during 2010-2018 population in rural counties dropped 0.5% while growing 7.1% in metropolitan counties.

Wisconsin's pattern was similar (Figure 3, right), with one exception. During the 1990s, rural Wisconsin counties grew faster than their urban counterparts (10.2% vs. 9.4%). Since then, Wisconsin's experience has mimicked national trends.

In addition to a general decline in growth rates, the number of rural counties losing population has grown significantly. During the 1990s, 30% of rural counties nationally lost residents. That percentage rose to 47% over the ensuing decade. Since 2010, 67% of rural counties lost population. In Wisconsin, percentages over the three periods studied were 0%, 44%, and 67%, respectively.

RURAL CHANGES BY STATE AND COUNTY

Across the country, rural population changes have not been uniform. The U.S. population generally has been moving south and west. Thus, it is not surprising that in 18 states mostly west of the Mississippi River, rural populations increased during 2010-2018. In North Dakota, Utah, Montana, Massachusetts, and Washington, rural growth was at least 7% (see Table 1, page 6).

During the 1990s, 30% of rural counties nationally lost population. By 2010-2018, a full two-thirds were seeing population decline.

Generally, most rural counties within each of these states were growing. The exception was North Dakota where the total rural population rose nearly 10% but over half of counties saw declines. Rural growth there was confined to just a few counties due to an oil boom.

Illinois comes in at the other end of the spectrum with the greatest drop in rural population. The number of rural residents in that state fell nearly 5%, with all 62 counties experiencing depopulation. West Virginia, Kansas, New York, and Pennsylvania also had broad-based losses.

FIGURE 3: Rural Population Growth Lags Both Nationally and In Wisconsin

Growth by County Type, U.S. (left) and Wisconsin (right), 1990-2018

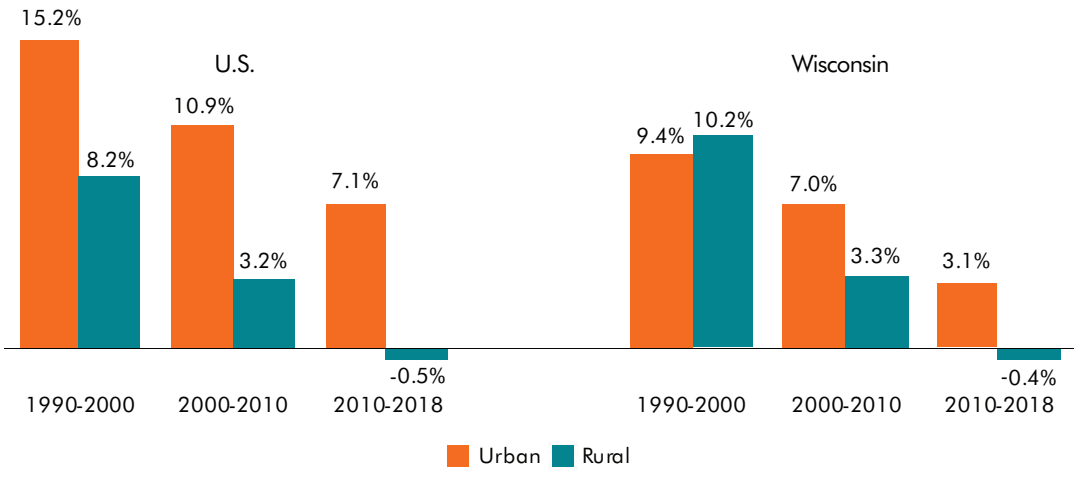


Table 1: Rural Population Change by State*
2010-2018

State	Rural Counties	% Decl.	Rk.	Pop. Chg.	Rk.
North Dakota	48	56%	15	9.9%	1
Utah	19	37%	8	9.9%	2
Montana	51	35%	7	7.9%	3
Massachusetts	2	0%	1	7.4%	4
Washington	20	10%	2	7.0%	5
Minnesota	***60***	***65%***	***21***	***0.1%***	***18***
Wisconsin	***46***	***67%***	***23***	***-0.4%***	***22***
Michigan	***57***	***70%***	***24***	***-0.8%***	***24***
Iowa	***77***	***83%***	***37***	***-2.6%***	***34***
New York	24	100%	43	-3.9%	41
Kansas	86	94%	42	-3.9%	42
Connecticut	1	100%	43	-4.6%	43
West Virginia	32	94%	41	-4.7%	44
Illinois	***62***	***100%***	***43***	***-4.8%***	***45***
U.S. Total	1,934	67%		-0.5%	

**Three states have no rural counties. Alaska and Hawaii are not included in the study.*

Wisconsin was about average in both population loss (-0.4%) and percent of counties losing residents (67%). The state fared better on both measures than all of its neighbors except Minnesota.

Experience by County

A more detailed look at individual counties across the country shows Wisconsin counties generally falling in the middle.

To simplify the analysis, counties were sorted by 2010-2018 population growth and then placed into groups, each containing 10% of the counties studied (deciles). Counties with the largest declines are in decile 1, while those with the greatest gains are in decile 10.

Of Wisconsin's 46 rural counties, 34 were in what might be termed "the middle," the fourth through seventh deciles (see Figure 4). Six counties (Dunn, Menominee, Monroe, Sauk, Vernon, and Vilas) ranked among the top 20% of rural counties nationally in growth (ninth and tenth deciles). Another five (Grant, Jefferson, Portage, Trempealeau, and Walworth) were among the top 30%. The only Wisconsin county in the bottom 30% nationally was Price County.

Compared to neighboring states, Wisconsin's performance was somewhat unusual. Illinois had 43 of its 62 counties rank among the bottom 30% nationally. Michigan had 17 of 57, Minnesota had 16 of 60, and Iowa had 26 of 77 counties in deciles one through three.

EFFECTS OF DEPOPULATION

The Price County experience highlighted at the beginning of this report detailed some of the negative effects of depopulation – a shrinking workforce, a loss of business establishments and jobs, and slowing income growth. These impacts have played out in many rural counties across the country.

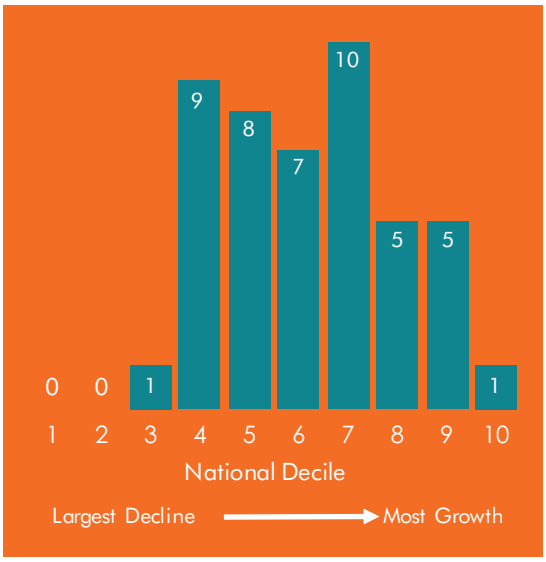
Labor Force

It may seem somewhat obvious that counties with declining populations generally experience a shrinking workforce. Unless the drop in population is due to fewer children or to a decline in the number of seniors who are typically retired from the workforce, depopulation will likely shrink the size of a county's labor force. Indeed, the correlation[2] between population growth and labor force growth was 0.60 during 1990-2018 and 0.67 during the more recent 2010-2018 timeframe, indicating the two move in the same direction and are strongly related.

The connection between population and workforce growth is shown in a simpler way in Figure 5 on page 7, where median growth rates are displayed by population growth decile. Median workforce growth was highest (5.0%) among

2 A correlation of 1.0 indicates a perfect positive relationship; -1.0 indicates a perfect negative relationship; and 0 indicates no relationship between change in population and change in labor force.

Figure 4: Wisconsin Rural Counties by Decile,
# of Wis. Counties by Decile Based on 2010-2018 Population Growth



counties with the greatest population growth (decile 10) and lowest (-14.1%) among those with the greatest population decline (decile 1). As median population growth weakened from decile 10 to decile 1, so did median workforce growth. Although not shown here, this pattern is repeated during 1990-2000 and 2000-2010.

Jobs

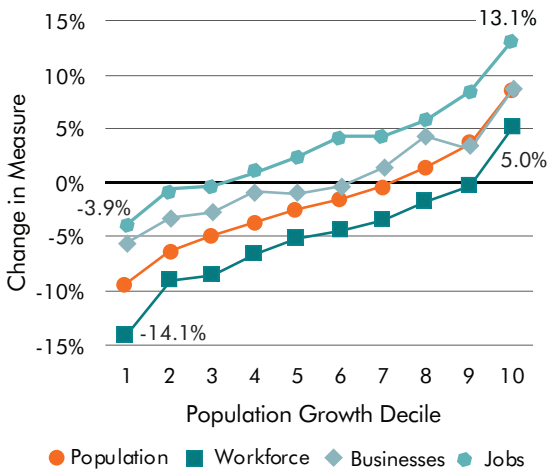
Similarly, population decline generally leads to reductions in the number of jobs in a county. The upper teal line in Figure 5 shows a median decline in jobs of 3.9% among decile 1 counties (those with the largest population declines) and an increase of 13.1% among decile 10 counties (greatest population gains). The 2010-2018 correlation between population and job change was 0.71, stronger than the correlation between population and workforce.

Generally, one might expect job and workforce changes to be similar. However, in all deciles during 2010-2018, median job growth exceeded median changes in labor force. The primary reason relates to a general decline in unemployment.

The labor force has two distinct components: those who have a job and those who are unemployed and looking for work. In 2010, the national unemployment rate was over 9%; almost one in 10 people in the labor force were without jobs and seeking work. As the economy expanded over the ensuing eight years, the unemployment rate dropped to about 3%. In 2018, just three of every 100 people in the labor force were seeking work.

Figure 5: Workforce, Businesses Track Population

Median Growth in Population, Labor Force, Jobs, and Businesses by Decile, 2010-2018



Population declines have impacted rural economies, with fewer workers, jobs, and businesses, and slower growth in income.

As the economy grew and jobs were created over the eight years, many were filled by people who were formerly unemployed. While all of the new jobs increased employment growth, some of them did not affect the size of the labor force; they only reduced the number of unemployed. Thus, job growth would generally exceed workforce growth.

Businesses

The number of businesses in a county is sensitive to both population and the labor market. For businesses that primarily serve local residents (restaurants, electricians and plumbers, small local retailers, etc.), a shrinking population means fewer customers and sales. As the population falls, these businesses tend to cut back on the number of jobs they provide. If depopulation is severe, they may cease operations or relocate.

Other businesses, like manufacturers, sell their products statewide or nationally and are less sensitive to local population changes. They are, however, affected by the local labor market. If the workforce is shrinking due to population decline, these businesses may find it hard to fill positions and opt to relocate. In other words, population decline can indirectly impact the number of businesses through a declining labor force.

Figure 5 shows how business growth is related to population change. As expected, in counties where population declined, the median number of business establishments also fell. In growing rural counties, the number of firms tended to grow.

Income

The impact of population decline on income is more nuanced than its impact on jobs, workforce, and firms. Generally, as jobs and business es-

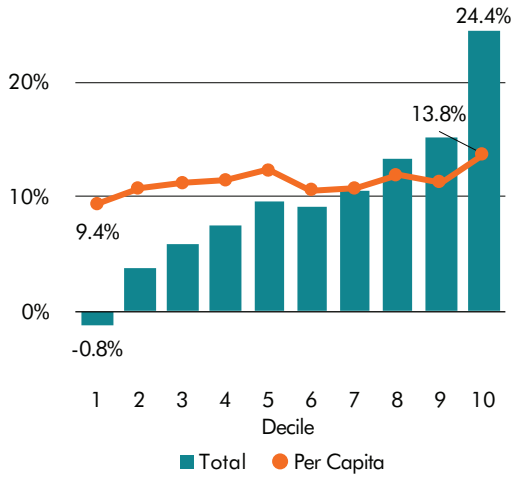
While population decline generally results in declining total income, it appears to have little impact on household or on per capita income.

tablishments decline with population, growth in total income in the county slows. However, there appears to be little impact on per capita income or on household income.

Median real (inflation adjusted) income growth among counties with the greatest population growth approached 25% during 2010-2018 (see Figure 6). Among counties with the greatest population declines, real income fell nearly 1%. For counties between the extremes, income growth generally weakened as population declined.

This should not be unexpected. As Figure 5 showed, among the fastest growing counties, increases in jobs, workforce, and business establishments ranged from 5% to 15%. For counties with the greatest depopulation, these measures declined from 4% to 15%.

Figure 6: Total Income Rises With Pop. Growth
Median Growth in Total and Per Capita Income (Inflation Adjusted) by Decile, 2010-2018



While total income tracks population changes fairly closely, per capita personal income (PCPI) does not. The correlation between growth in population and total income was 0.64, a relatively strong relationship, but it was just 0.13 for per capita income, indicating almost no relationship between the two measures.

There was, however, a significant difference – about a half a percent per year – in median PCPI growth between the fastest growing counties and those with the largest population declines. Median PCPI growth among counties in decile 10 was 13.8% over eight years but just 9.4% among those in decile 1. For counties between these extremes, differences were minimal.

A second measure of income – household income – also showed little relationship with population growth (correlation of 0.3). A related measure, the poverty rate, also does not appear to be related to changes in population. For all three periods studied, the correlation between the poverty rate and population change is near zero.

There are several possible explanations for the lack of correlation. One is that while a county's entire economy is growing or shrinking, population is often changing in the same direction. In the case of decline, fewer goods are being produced by fewer workers, and thus per capita and household incomes are somewhat unaffected. However, if depopulation results in fewer jobs in high-paying industries, some decline in household income would be expected to occur.

It is also possible that the eight and 10-year periods are too short to see the long-term-impact of depopulation on income. To test that, counties were sorted by their 28 year population change (1990-2018). Changes in household and per capita incomes were then compared to population changes. As in the shorter 2010-2018 period, correlations between changes in population and changes in both income measures are near zero, making the time frame an unlikely explanation.

Unemployment

Like per capita and household income, the number of unemployed residents in a county tends to adjust with population changes. As population grows, so does the number of jobs and the number of workers. As it declines, the reverse occurs. Thus, the unemployment rate, which is the number of unemployed residents as a share of

the total workforce, seems to have little relationship with population changes.

However, there was one pattern that showed up in the data. Median unemployment rates in both 2010 and 2018 were lower among growing counties than in counties with population declines.

WISCONSIN DEPOPULATION EFFECTS

Figure 4 on page 6 showed how Wisconsin counties fared relative to their counterparts on population growth during 2010-2018. Their experiences on the economic measures related to that growth are explored next. For each measure, 2010-2018 growth is compared to other counties in Wisconsin and to counties nationally.

Counties varied widely on their performance on these measures. Thus, an aggregate economic performance measure is also calculated and discussed.

Labor Force

During 2010-2018, Wisconsin's labor force grew 1.7%. However, it was primarily metropolitan counties that were responsible for the gain. As a group, Wisconsin's urban counties grew their labor force by 2.7%, while rural counties saw a 1.2% drop in the size of their workforce.

Despite the reduction in the rural workforce overall, some rural counties bucked the trend: Sixteen counties expanded their labor force during this period, with 14 exceeding average state growth. In Barron, Clark, Dunn, Jackson, and Lafayette counties, labor force growth exceeded 5% (see Table 2 on page 11).

With 31 of 46 rural Wisconsin counties losing population during these years, it is not unexpected that a majority also experienced workforce decline. In Adams, Iron, Price, and Wood counties, labor forces shrank more than 10%. In another eight counties, declines topped 5%.

The workforce decline in much of rural Wisconsin is a troubling development that should alarm policymakers. However, compared to rural counties elsewhere, Wisconsin counties held their own.

The maps on page 12 show how Wisconsin's rural counties fared on various economic measures compared to other rural counties nationally. Similar to what was done earlier with population, counties are organized into deciles based on their performance on each measure.

The workforce decline in much of rural Wisconsin is a troubling development that should alarm state and local policymakers.

Wisconsin generally outperformed its counterparts elsewhere on labor force growth. If population and labor force change were perfectly correlated, the state would have the same number of counties in each workforce decile as population decile. Instead, Wisconsin had nearly twice as many counties in the top three workforce deciles (20) as it did in population deciles (11).

However, the state also had four counties (Adams, Iron, Price, and Wood) among the bottom 30% on workforce growth; Price County was the only county in the bottom 30% on population growth.

Jobs

The pattern of urban counties in Wisconsin outperforming their rural counterparts held for job creation as well. Statewide, the number of jobs rose 9.0% during 2010-2018. The increase in urban counties was 10.5%, while in rural counties it was less than half that at 4.5%.

As was seen earlier among counties nationally, job creation in Wisconsin counties was consistently higher than labor force growth during 2010-2018. While just 16 rural Wisconsin counties expanded their workforce, 35 added jobs over the eight-year period.

Leading the way were Clark and Walworth counties with employment gains of more than 12% (see Table 2 on page 11). Job creation in Bayfield, Dunn, and Portage counties also exceeded the statewide average of 9.0%.

However, nearly 90% of rural counties lagged statewide growth, including 11 counties that had fewer jobs in 2018 than in 2010.

During 2010-2018, 11 rural counties in Wisconsin grew income faster than the state average; eight of them out-paced urban income growth.

Declines were largest in Buffalo, Iron, Price, Green Lake, and Waupaca counties.

While Wisconsin counties generally outperformed their national counterparts on workforce growth, they tended to underperform on job growth. Despite having 11 counties in the top 30% on population growth, Wisconsin only had six ranked that high on job growth. While just one county ranked in the bottom 30% on population growth, seven were there in job growth (see maps on page 12).

Businesses

To a large extent, business growth in Wisconsin mirrored employment growth. In total, the number of business establishments increased 11.3% during 2010-2018, with urban growth slightly higher (13.9%) and rural gains much lower (4.7%). Also similar was the number of counties adding firms (34 vs. 35 that added jobs).

Business growth was greatest among some of the state's least populous counties: Clark, Lafayette, Menominee, and Trempealeau. These relatively small counties also have relatively few businesses, thus a small change in the number of firms can result in a large percentage gain.

Florence, Langlade, and Price counties experienced the largest decline in business establishments.

Relative to other counties nationally, Wisconsin's rural counties performed much better on business creation than on job creation (again, see maps on page 12). As with labor force and jobs, the more teal seen on the map, the better Wisconsin's relative performance. Just a glance at the map clearly shows that relative to other rural counties nationally, the state's performance on business growth exceeded its performance on employment growth.

The numbers back that up. Twenty-two Wisconsin counties were among the top 30% of counties in business growth; only six were there on job growth.

Income

Total income changes during 2010-2018 in Wisconsin yielded some surprising results. The general pattern was the same, with urban counties (+18.4%) outperforming rural counties (+13.9%). However, the gap between the two was smaller than the gap on labor force, jobs, and firms.

Moreover, 11 rural counties grew income at rates faster than the state average, and eight had income growth that exceeded the urban average.

In Vilas County, real income increased 31% (see Table 2 on page 11). In Door County, it climbed 26%.

Relative to counties nationally, Wisconsin's rural counties outperformed on income growth. Seventeen counties ranked in the top 30% nationally on this measure, compared to just 11 on population growth. Moreover, only Buffalo and Price counties ranked among the bottom 30%.

Total Economy

A look at Table 2 on page 11 makes it clear Wisconsin counties varied widely on these economic measures. There was not a one-to-one relationship between population growth and changes in the measures studied. Nationally, this is also the case.

Thus, an aggregate economic measure was created based on each county's 2010-2018 performance on growth in workforce, jobs, firms, and income. Then, like the other measures, this total economy measure was sorted and counties were placed in national deciles.

This relative economic measure shows that Wisconsin's rural counties fared better than might be expected given their population changes. While the state had 11 counties among the top 30% in population growth, it had 21 rank that high on the economic composite.

Clark, Menominee, and Walworth counties ranked among the top 10% of counties nationally, while Barron, Dunn, Jackson, Lafayette, Monroe,

Polk, Portage, and Vilas counties were in the top 20%.

Three counties, Buffalo, Langlade, and Price ranked among the bottom 20% on this economic composite.

TAKEAWAYS

The U.S. is in the midst of a depopulation of rural counties. During 2010-2018, two-thirds of rural counties nationally lost population. That same percentage of Wisconsin counties lost residents.

This phenomenon is long in the making. For decades, urban counties have been growing faster than rural ones. However, 20 to 30 years ago, most rural counties were still growing. During the 1990s, 70% of rural counties added population nationally; in Wisconsin, all rural counties did.

There can be significant economic consequences to depopulation. Generally, counties losing population experience declines in the size of their workforces, the number of jobs, and the number of businesses. Income often grows less in these counties than in those with growing populations. In other words, economic activity is reduced.

Although not examined here, it is likely that depopulation affects local governments as well. With fewer residents and a shrinking tax base, funding for schools, municipalities, and counties becomes challenging. Meanwhile, the need for public services does not drop proportionally to population loss.

While Wisconsin's rural counties are experiencing depopulation, it has generally been less severe than elsewhere. As a result, the economic consequences have been muted to some degree.

Policymakers should not be complacent. Just because Wisconsin counties have outperformed since 2010 does not mean that will continue over the next decade. A followup report from Forward Analytics will examine characteristics or policies that may help insulate counties from depopulation or limit its consequences.

A special thank you to Jack Votava who contributed to this project. A student at the University of Chicago, Mr. Votava interned at Forward Analytics in the summer of 2019 and compiled and analyzed most of the data used in this report. Forward Analytics is grateful for his work.

Table 2: Changes in Economic Measures by County, *2010-2018*

County	Pop.	Labor Force	Jobs	Firms	Income
Adams	-2.5%	-10.2%	5.8%	-4.2%	12.0%
Ashland	-3.4%	-6.0%	-0.4%	0.5%	11.9%
Barron	-1.5%	5.3%	6.9%	12.9%	18.3%
Bayfield	0.2%	-1.0%	9.1%	3.4%	17.4%
Buffalo	-3.4%	-7.6%	-12.2%	3.8%	3.9%
Burnett	-0.4%	-3.2%	6.2%	4.2%	13.6%
Clark	0.1%	5.3%	12.6%	19.4%	20.7%
Crawford	-2.1%	-5.9%	-1.5%	-2.9%	13.5%
Dodge	-1.0%	1.9%	7.1%	5.5%	9.4%
Door	-0.6%	-1.6%	5.8%	1.1%	26.4%
Dunn	2.9%	5.2%	9.7%	7.5%	13.9%
Florence	-2.3%	1.2%	6.5%	-19.4%	19.8%
Forest	-3.4%	-6.0%	0.0%	-2.3%	16.0%
Grant	0.7%	2.6%	3.8%	5.0%	13.0%
Green Lake	-0.7%	-5.2%	-3.8%	3.5%	10.3%
Iron	-4.1%	-10.3%	-6.7%	-2.6%	18.9%
Jackson	0.1%	5.5%	7.9%	7.2%	13.9%
Jefferson	1.7%	-0.3%	4.6%	5.3%	14.6%
Juneau	-0.2%	-0.9%	4.5%	8.3%	7.2%
Lafayette	-1.0%	8.4%	6.6%	16.6%	5.8%
Langlade	-3.5%	-6.5%	-0.2%	-7.9%	9.7%
Lincoln	-3.7%	-1.9%	3.4%	5.3%	9.7%
Manitowoc	-2.9%	-7.2%	1.5%	3.1%	5.2%
Marinette	-3.1%	-7.8%	0.8%	-6.9%	9.9%
Marquette	0.2%	0.6%	4.0%	2.3%	14.2%
Menominee	10.1%	4.5%	1.7%	35.1%	13.6%
Monroe	3.1%	2.3%	6.5%	8.6%	15.8%
Oneida	-1.5%	-4.4%	1.5%	-2.3%	15.6%
Pepin	-2.4%	3.8%	3.1%	9.8%	12.4%
Polk	-1.4%	2.7%	6.6%	6.3%	17.6%
Portage	1.3%	-1.4%	9.3%	11.0%	17.2%
Price	-5.4%	-11.8%	-4.0%	-7.4%	4.3%
Richland	-3.6%	-3.1%	2.1%	4.1%	15.4%
Rusk	-4.1%	-2.1%	2.2%	9.8%	21.6%
Sauk	3.7%	-0.5%	3.3%	0.0%	20.0%
Sawyer	-0.4%	-4.6%	-0.1%	-3.2%	11.1%
Shawano	-2.7%	-1.3%	5.2%	1.3%	10.6%
Taylor	-1.3%	-3.1%	1.6%	4.7%	6.8%
Trempealeau	2.2%	2.8%	2.1%	14.6%	9.2%
Vernon	3.4%	2.6%	3.6%	9.9%	11.7%
Vilas	2.4%	-1.6%	6.9%	-2.1%	31.0%
Walworth	1.5%	3.8%	13.3%	12.0%	24.5%
Washburn	-0.2%	-1.2%	3.7%	9.2%	17.2%
Waupaca	-2.4%	-4.9%	-3.2%	5.1%	6.9%
Waushara	-1.0%	-2.9%	6.9%	1.0%	12.2%
Wood	-2.3%	-11.2%	2.1%	7.0%	8.8%
Wis. Median	-1.0%	-1.5%	3.6%	4.4%	13.5%
U.S. Median	-2.0%	-4.8%	3.3%	12.5%	9.7%

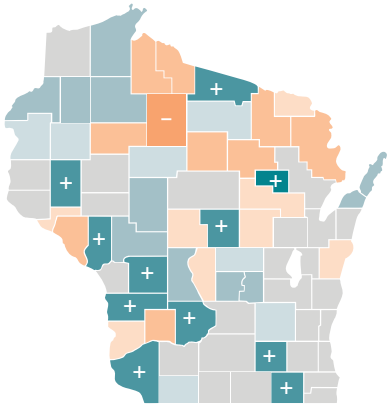
WISCONSIN'S RELATIVE RURAL PERFORMANCE

The maps below show Wisconsin's relative performance on a variety of indicators. For each individual measure, counties were sorted by 2010-2018 growth, from lowest to highest. Counties were then grouped into deciles, or groups of 10% of the counties studied. Counties in decile 1 had the least growth or greatest decline on the particular measure, while those in decile 10 had the greatest growth. The more teal seen on the map, the better Wisconsin's rural counties fared relative to their rural counterparts across the country. If there is more orange, they tended to fare poorly.

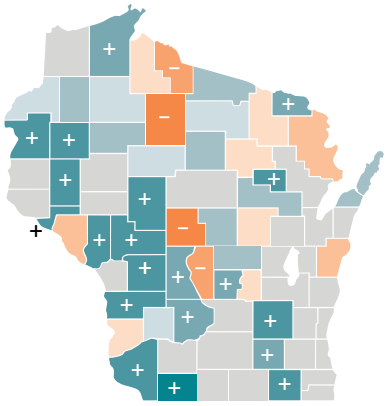
A "+" sign indicates the county is in the top 30% of counties nationally (deciles 8 through 10) on that measure. A "–" sign indicates it is in the bottom 30% (deciles 1 through 3).

The total economy measure is a composite of the changes in the four economic measures: labor force, jobs, firms, and income. Before combining them, each set of growth rates were normalized. Then the four measures were averaged with each measure having the same weight. In other words, it was not assumed that changes in one economic measure were more important than changes in any of the others.

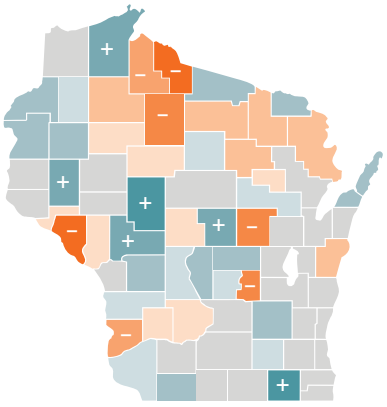
Population



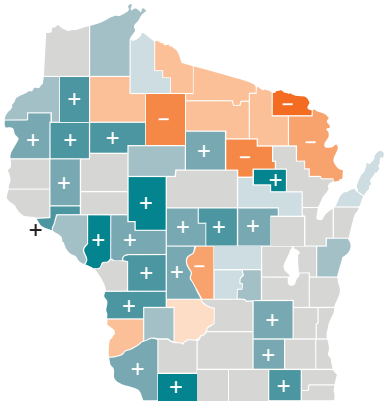
Labor Force



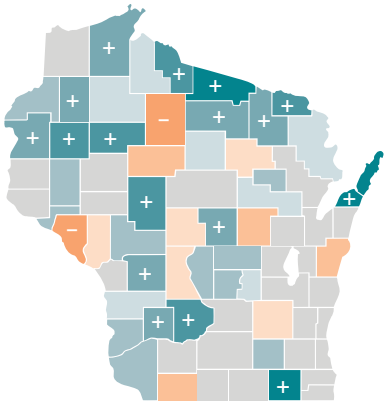
Jobs



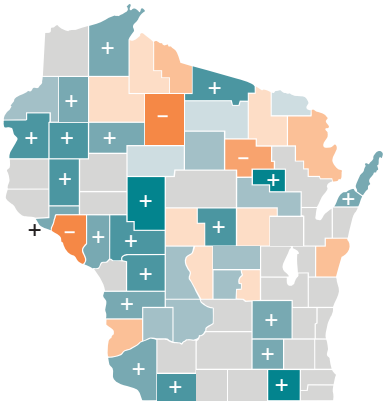
Businesses



Income



Total Economy



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